AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) An image processing apparatus, comprising:

edge detecting means for determining the presence/absence of an edge at each pixel of input ~~image data;~~ data and detecting a position of the edge at each edge pixel;

selecting means for selecting a weighting matrix corresponding to the position of the edge of each target pixel determined to have an edge by said edge detecting means;

~~calculating means for calculating data of the target pixel and the pixels surrounding the target pixel using the weighting matrix selected by said selecting means;~~

enhancement range determining means for determining, using said weighting matrix, ~~the~~ a range of edge enhancement of each said target pixel determined to have an edge ~~the target pixel by comparing the calculation result of said calculating means to a specific threshold value~~; and

edge enhancing means for executing an edge enhancement process on data of object pixels within the enhancement range determined by said enhancement range determining means.

2. (Original) An image processing apparatus according to claim 1, wherein said enhancement range determining means increases the weighting of components corresponding to the interior side of the edge in the weighting matrix.

3. (Original) An image processing apparatus according to claim 1, wherein said edge detecting means determines the edge to be between pixels.

- 2 -

4. (Original) An image processing apparatus according to claim 1, wherein

said enhancement range determining means selects the weighting matrix based on the

presence/absence of an edge in four directions surrounding the target pixel.

5. (Original) An image processing apparatus according to claim 1, wherein

said edge enhancing means executes processing based on the hue and chroma of the

pixels surrounding the object pixel.

6. (Original) An image processing apparatus according to claim 1, wherein

said edge enhancing means executes processing based on the distance of the object pixel

to the target pixel.

7. (Currently Amended) An image processing method, comprising the steps of:

determining the presence/absence of an edge at each pixel of input image data;

selecting a weighting matrix corresponding to the position of the edge for each target

pixel determined to have an edge;

~~calculating data of the target pixel and pixels surrounding the target pixel using selected~~

~~weighting matrix;~~

~~comparing the calculation result to a specific threshold value;~~

determining, using said weighting matrix, a ~~the~~ range of edge enhancement for ~~the~~ each

said target pixel ~~based on the comparison result~~ determined to have an edge; and

executing an edge enhancement process for the object pixels within the determined ~~actual~~

edge enhancement range.

8. (Original) An image processing method according to claim 7, wherein the weighting of components corresponding to the interior side of the edge in the weighting matrix is increased in the step of determining the range.

9. (Currently Amended) A medium readable by a computer storing computer-executable programs comprising the steps of:

determining the presence/absence of an edge at each pixel of input image data;

selecting a weighting matrix corresponding to the position of the edge for each target pixel determined to have an edge;

~~calculating data of the target pixel and pixels surrounding the target pixel using selected weighting matrix;~~

~~comparing the calculation result to a specific threshold value;~~

determining, using said weighting matrix, a ~~the~~ range of edge enhancement for ~~the~~ each said target pixel ~~based on the comparison result~~ determined to have an edge; and

executing an edge enhancement process for the object pixels within the determined ~~actual~~ edge enhancement range.

Claim 10 (Cancelled).

11. (New) An image processing apparatus, comprising:

an edge detector for determining the presence/absence of an edge at each pixel of input data and detecting a position of the edge at each edge pixel;

a selector for selecting a weighting matrix corresponding to the position of the edge of each target pixel determined to have an edge by said edge detecting means; and

a controller configured to determine, using said weighting matrix, the range of edge enhancement of each said target pixel determined to have an edge;

said controller further configured to execute an edge enhancement process on data of object pixels within the enhancement range determined by said enhancement range determining means.